

INTEGRATED REDUCED MEDIA INDEPENDENT INTERFACE

Abstract

An integrated reduced media independent interface (Integrated RMII) and related method for interconnecting a MAC Circuit and a PHY Circuit. The Integrated RMII comprises a TXD, a TX_EN, a REF_CLK, a CRS_DV, and a RXD as essentially specified in the IEEE 802.3 and IEEE 802.3u specifications. The CRS_DV is at a predetermined low potential in an error-detection mode and an idle mode, and at a predetermined high potential in a transmission mode. When the CRS_DV is at the predetermined low potential, the MAC Circuit can reject data transmitted from the PHY Circuit via the RXD. When the CRS_DV is at the predetermined high potential, the MAC Circuit can receive the data transmitted from the PHY Circuit via the RXD.